

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8, MONTANA OFFICE

FEDERAL BUILDING, 10 W. 15th STREET, SUITE 3200 HELENA, MONTANA 59626

October 4, 2012

John W. Ray, Ph.D. 915 West Galena St. Butte, MT 59701

Dear Dr. Ray:

This letter responds to your September 23, 2012 email titled "Environmental Justice Complaint – Butte, Montana Health Studies", and to your additional September 23, 2012 email titled "Complaint- BSB Health Department Cannot Conduce (sic) a Valid and Reliable Health Study and Should Be Removed". Your emails address various issues associated with the development of the Public Health Study Work Plan by the Butte Priority Soils operable unit Respondents, including Butte Silver Bow County (BSB).

The first point you make concerns the use of "incidence studies", which you consider unreliable. Your contention has been answered in a previous email response to you from the U.S. Environmental Protection Agency (EPA), and at a public listening session for the health studies. To repeat our response, Dr. Michelle Watters (Agency for Toxic Substances and Disease Registry Medical Officer and expert in the field of human health and epidemiology) advises that:

Incidence rates are the number of new cases of a disease occurring in a defined population during a specific time period (typically a year). Incidence reflects the occurrence of a disease and does not reflect the severity of the disease, or in the case of cancer, the staging of the disease. Depending upon the disease and the type of health outcome data collected, incidence rates may not accurately represent the rate in lower income populations. For example, lower income populations may be under represented in a tally of physician office visits if one wanted to determine an incidence for an acute illness such as a colds or rash or a chronic illness such as hypertension because individuals may not seek medical attention or self-treat. Similarly, lower income populations may have a higher incidence rate of a disease if one was to use emergency room visits in making these estimates because they have no specific health care provider or the condition has become severe enough to seek medical attention in an urgent manner.

For cancer studies, incidence rates are the most appropriate epidemiologic analysis to use to ascertain the rates of cancer in a community. The state tumor registry is close to complete and accounts for both in-state and out-of-state cancer diagnoses to residents by reporting from pathology labs, oncology clinics, and hospital physician practices. The tumor registry also captures cases from death certificates that have not been reported earlier by these other mechanisms. The cancer incidence rate does not reflect the stage of cancer and prognosis. This is true regardless of socioeconomic class. Because cancer prognosis depends on the stage when diagnosed and the treatment received, cancer mortality rates are often elevated in lower socioeconomic groups that do not have good preventive services and screening, access to healthcare,

or access to treatment. Thus cancer mortality rates reflect public health gaps and are used to identify needed services.

When one interprets health study data or selects an epidemiological study design, it is important to understand the limitations of any database being used. As stated, for cancer, tumor registry data and the calculation of incidence rates is preferred over cancer mortality data. For other health conditions, socio-economic factors that influence the rates need to be put in context.

In short, use of incidence rate cancer information is appropriate and representative. EPA will work closely with the Butte Silver Bow Health Department (BSB) and other Group I Respondents to ensure that they continue to use the most representative data available in conducting the human health protective actions required by the Butte Priority Soils operable unit (BPSOU) Record of Decision (ROD)(EPA 2006).

Responding to Environmental Justice (EJ) and other process concerns presented in your messages, I would like to explain the processes past, present, and future for the work plan and health studies, and reference dates upon which EPA has responded to your specific letters and emails concerning related EJ concernsⁱ.

Under the EPA Unilateral Administrative Order for conduct of the BPSOU ROD (EPA 2011), Group I Respondents, including the Atlantic Richfield Company (AR) and BSB, are required to prepare a Public Health Study Remedial Design Workplan that will be approved by EPA, in consultation with the State Department of Environmental Quality (DEQ). These entities can and have provided qualified personnel for development of the work plan and conduct of the studies. The work plan will be submitted in draft form to the EPA and DEQ by October 31, 2012. Following the submission of the draft, additional public meetings will be held to share information and solicit community input on the draft work plan (expected in November/December 2012 timeframe), and, following completion of the study, to present a summary of the public health study findings and further solicit input (expected in September 2013). Throughout the planning and implementation process, periodic community updates will be disseminated via the community advisory committee, which was appointed by the BSB Board of Health to provide support and guidance to the technical team throughout the public health study process.

As part of its role in developing the Public Health Study Remedial Design Work Plan and the subsequent studies, the BSB Health Department appointed an advisory committee to assist with its efforts. This committee is not actually developing the work plan, as your messages seem to suggest, but will be advising the BSB Health Department about the work plan and study. In doing so, EPA will encourage the BSB Health Department and advisory committee to solicit low income community member input, as well as other public input.

BSB has already conducted substantial public involvement activities. Public outreach activities began early in the project planning process. In May 2012, BSB HD held a series of public listening sessions where members of the public, including low income community members, were given the opportunity to provide critical input regarding community environmental health concerns. EPA also held a public meeting in May to provide additional information about the

planning activities being conducted for the public health study. Questions and concerns that came from the public meetings are being addressed through a suite of fact sheets designed by the health study team and distributed in the Montana Standard and Butte Weekly (a free weekly paper). The fact sheets will be attached to the draft and final work plan.

EPA will work with the BSB to ensure that environmental justice areas are considered when determining future outreach activities such as location of public meetings and notice of opportunities for public input.

The draft work plan, which as noted will be presented for public comment when completed in draft form, will present a phased approach to address the study and its objectives. The first phase will rely on analyses of the more than ten years of blood lead data compiled by the BSB HD to assess blood lead levels (BLLs) in Butte children and pregnant women.

The results of this initial phase will be used to assess the efficacy of the RMAP, as well as inform the need for and objectives of subsequent study phases. Due to confidentiality issues and the Health Insurance Portability and Accountability Act (HIPAA) which pertains to privacy of health information, EPA cannot request specific information about those tested; however, EPA will work with the BSB HD to ensure that the data represents a broad spectrum and is inclusive of underrepresented populations within the Butte area.

EPA will continue to provide support and oversight in the design of the current and future health studies.

Sincerely, This June

Nikia Greene

Remedial Project Manager

cc:

Sara Sparks, EPA Libby Faulk, EPA Joe Vranka, EPA Joe Griffin, DEQ Henry Elsen, EPA Corbin Darling, EPA Terri Hocking, BSB Dan Powers, BSB

EPA has issued detailed EJ complaint responses to you on August 2, 2004; August 23, 2005; December 26, 2006; January 23, 2007; and January 12, 2010.